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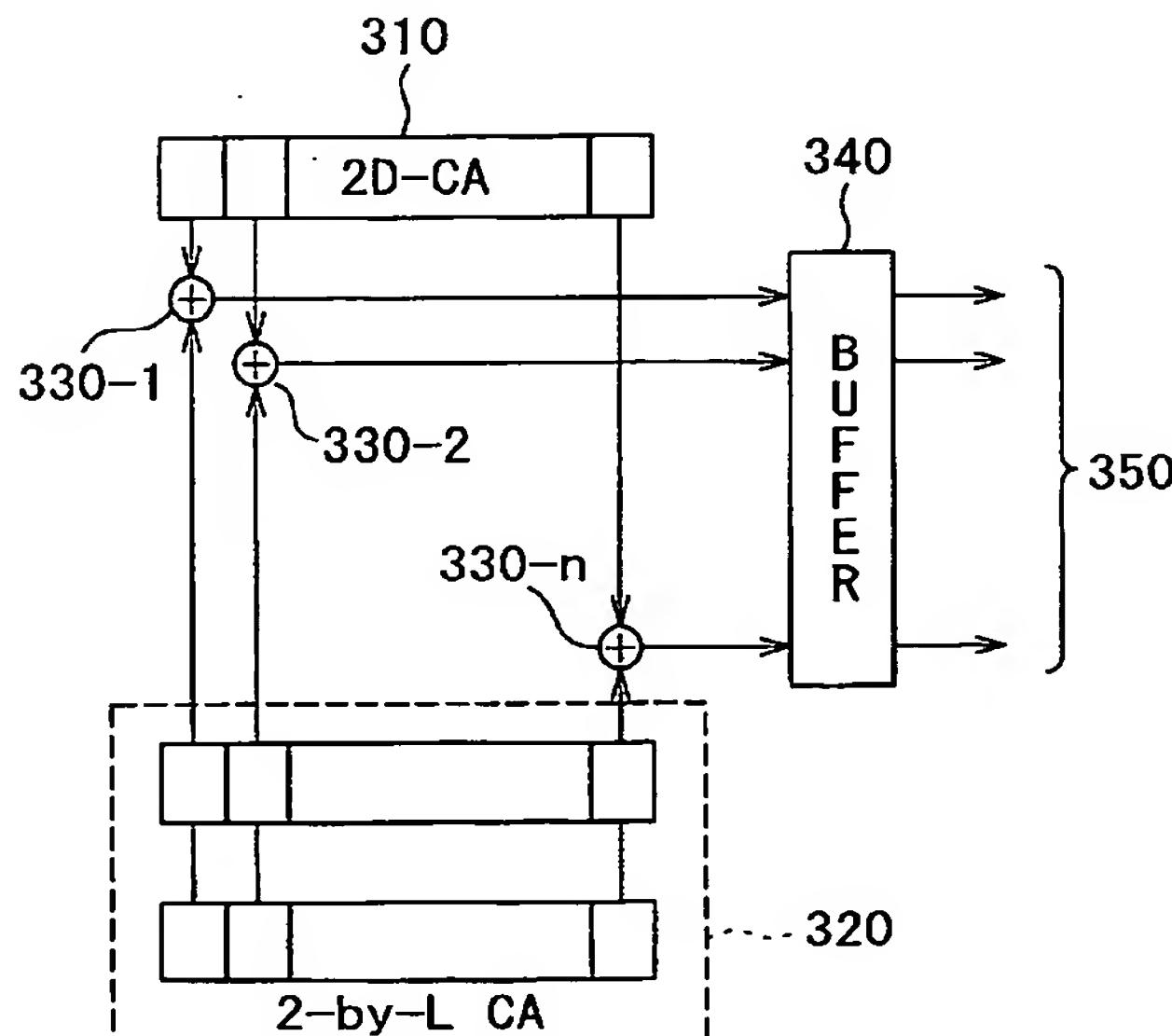
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(54) Title: **METHOD AND APPARATUS FOR CELLULAR AUTOMATA BASED GENERATION OF PSEUDORANDOM SEQUENCES WITH CONTROLLABLE PERIOD**



(57) Abstract: An object of the present invention is to provide a compact apparatus for generation of desired pseudorandom sequences with controllable period. An apparatus for generating pseudorandom sequences includes two-dimensional cellular automata 310 for generating a first sequence, 2-by-L cellular automata 320 for generating a second sequence, adders 330-1, 330-2, ..., 330-n for performing bit-to-bit mod2 sum of the first sequences and the second sequences, and a buffer 340 for buffering the resultant sequences from the adders 330-1, 330-2, ..., 330-n.

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